

## ONE CHIP USB OPTICAL MOUSE SENSOR SOLUTION

### Abstract of the Disclosure

An apparatus for controlling the position of a screen pointer for an electronic device having a display screen includes a light source for illuminating an imaging surface, thereby generating reflected images. The apparatus includes a single chip for receiving the reflected images, generating digital representations of the reflected images, and generating a first set of movement data based on the digital representations of the reflected images. The first set of movement data is indicative of relative motion between the chip and the imaging surface. The single chip includes a serial interface for outputting motion data in a serial format based on the movement data.